CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 11/08/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: KAY COPPER

ALTERNATE NAMES:
PATENTED CLAIMS MS 3512
BYCKEYE, PATENTED
MARIETTA, PATENTED
DIORITE, PATENTED
HARRIET, PTENTED
PATENTED CLAIMS MS 3743

YAVAPAI COUNTY MILS NUMBER: 866B

LOCATION: TOWNSHIP 8 N RANGE 2 E SECTION 4 QUARTER E2
LATITUDE: N 34DEG 03MIN 37SEC LONGITUDE: W 112DEG 09MIN 35SEC
TOPO MAP NAME: BLACK CANYON CITY - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER SULFIDE
ZINC SULFIDE
SILVER
GOLD

BIBLIOGRAPHY:
USGS BLACK CANYON CITY QUAD
BLM MINING DISTRICT SHEET 32
ADMMR KAY COPPER MINE FILE
LINDGREN, W. ORE DEPTS OF JEROME & BRADSHAW
MTS QUADS USGS BULL 782 1926 P 155
AZ MINING JOURNAL SEPT 1917 P 15
CLAIMS EXTEND INTO SEC. 4 & 9
JEROME, S C 1956 GEO RECON UNIV. UTAH PHD

KAY COPPER COMPANY

YAVAPAI COUNTY

USGS Bull. 782 p. 155

Production Possibilities of the Marginal
Copper Mines in Arizona, 1941, p. 74

See: Arizona Mining Journal Issues of
June 1919 p. 64, Feb. 1920 p. 46,
April 1920 p. 16, June 1920 p. 28
June 1918, p. 45; July 1918, p. 17;
Dec. 1918, p. 23

MRRS - Upstairs in the flat storage area - Third Drawer

KAY COPPER CO.

A. W. Ames
P. O. Box 299
Phoenix

5/16 - 1st

5/20 - Returned

L. E. Foster
Box 776
Phoenix, Arizona

6/11 - 2nd
Complete

7/5/55

Kay Copper Co.
operated by
Drake Mining Co.
Larry Drake Pres.
~~4038~~ 56th Ave
~~3S 41~~
Tucson

S 33, T9N R2E
S 4 T8N R2E

WR KAP 9-9-77 - Ron Hanna, Triangular Mining Co., reported the following: Exxon continues to spend time and money on the K (Kay) Copper property. Rumors are they have a significant ore body-maybe massive sulphide. 9-12-77 bh

---

R/H

KAY COPPER

Cu, Au, Ag

Yavapai 13 - 6 S 4, T 8 N, R 2 E

L. E. Foster, 802 Beach St., Silver City, N. Mex. '44

NAME OF MINE: KAY COPPER
OWNER:

COUNTY: Yavapai
DISTRICT:
METALS: Cu

OPERATOR AND ADDRESS		MINE STATUS	
Date:		Date:	
4/45	L.E.Foster, Box 776, Phoenix	4/45	Financing

KAY COPPER MINE

YAVAPAI CO.
BLACK CANYON DIST.

Interview with Paul Edwards (of Edwards Bros. Trucking Co.) 5/24/66.

According to Paul Edwards, Edwards Bros. have set up a small concentrating plant at 2300 W. Broadway, Phoenix (276-2489). The principal machine is a 5" x 11" Remer Jig, once owned by Al Stoval and purchased from Western Machinery Co., Phoenix. This Jig has 2 eccentrics operation with 2 up and down motions. The dump material from Kay copper runs 2-2.25 percent copper and some gold and silver. The rock here is mostly schist with sulphides and this seems to concentrate with a ratio of 8.5-9:1. Extraction, however is low since the schist is severly altered and weathered and yields slimes in considerable quantity.

A 70-ton car of concentrates shipped to Magma, at Superior, smelter netted about $21.00 or $30.00 per ton. The ore ran 5.7 percent copper and $4 to ton in gold and silver. Some of this car came from the Critic. The Kay dumps are believed to contain in excess of 100,000 tons, but the overall grade has not yet been determined.

MEMO LAS 5/24/66

Stopped at Iron King and met Mr. Statler at the assay office. He said he heard some Canadian firm was doing some work at the Kay Cu mine in Blk. Canyon. He said Del Harvey, a realtor, in Prescott owned the property. Contacted Mr. Harvey, who said the 4 Bar Mining Co. of Vancouver, B. C. had a lease on the Kay Copper mine and intended to dewater and sample it. G.W. WR 9/17/71

Went to the Kay Copper Mine west of Black Canyon City. No activity was apparent and an "old timer" living near-by said there had been none since drilling stopped last Spring. GW WR 10/1/71

It was reported by the owner, Mr. Harvey, that the Kay Copper Mine near Rock Springs was to be dewatered by a Canadian concern, however, no work has started. GW QR 9/71

The ownership of the patented claims in the Kay Mine area of the Tip Top Mining District in Yavapai County is complex. Several owners are paying taxes of this date including: Exxon Corp., P.O. Box 53, Houston, Texas; Continental Service Corp., P.O. Box 500, Phoenix, AZ; Phillip Allins, P.O. Box 109, Black Canyon City, Arizona, phone 374-5532; David Albins, P.O.Box 99, Mayer, Arizona; Richard T. Smith, P.O.Box 20, Black Canyon City, Arizona; Gary B. Nichols, 7222 W. St. Johns, Peoria, Arizona. WR MG 11/9/79. (Mike reports that some of these people own the Kay and some own other mines in the area.)

KAY COPPER MINE

YAVAPAI COUNTY

MG WR 3/16/84: Mr. Grover Heinrichs informs me that Exxon has drilled and has apparently defined a massive copper deposit of un-reported tonnage and grade at the Kay property in the Tip Top mining district of Yavapai Co. The drilling reportedly was done four or five (?) years ago.

NJN WR 6/28/85: Received the following information on the Kay Copper Mine (f) Yavapai County from Perry Durning (c). Exxon drilled out 3 million tons of moderate grade there in 1980 however it was quite deep and not economic to go after at that time.

MG WR 2/7/87: Rayrock Yellowknife Resources Inc. reportedly will have a joint venture soon with Exxon to explore the Kay Mine area (file) Yavapai County for massive sulfide potential.

NJN WR 10/16/87: Nick Caruouso (card) reported that Rayrock Mines has acquired the Kay copper (file) Yavapai County from Exxon and that Carl Anderson has acquired the adjacent Greyhound property.

COMMODITY INFORMATION

- COMMODITIES PRESENT C10: CU, PB, AU, AG
- ORE MINERALS C30: CHALCOPYRITE, GALENA, AURIFEROUS PYRITE, SPHALERITE, TETRAHEDRITE
- COMMODITY SUBTYPES C41:
- GEN. ANALYTICAL DATA C43:
- COM. INFO. COMMENTS C50:

* SIGNIFICANCE

	PRODUCER		NON-PRODUCER	
MAJOR PRODUCTS	MAJOR	CU, PB, AG	MAIN COMMODITIES PRESENT C11	
MINOR PRODUCTS	MINOR	AU	MINOR COMMODITIES PRESENT C12	
POTENTIAL PRODUCTS	POTEN	ZN		
OCCURRENCES	OCCUR		OCCURRENCES OCCUR	

*PRODUCTION

PRODUCER

PRODUCTION (YES) (circle) — circled: YES

PRODUCTION SIZE (SML) MED LGE (circle one) — circled: SML

NON-PRODUCER

PRODUCTION UND NO (circle one)

EXPLORATION OR DEVELOPMENT

*STATUS

PRODUCER — STATUS AND ACTIVITY A20: 4

NON-PRODUCER — STATUS AND ACTIVITY A20:

- DISCOVERER L20:
- YEAR OF DISCOVERY L10: EARLY 1910'S
- NATURE OF DISCOVERY L30: B
- YEAR OF FIRST PRODUCTION L40: 1910
- YEAR OF LAST PRODUCTION L45: 1966
- PRESENT/LAST OWNER A12: DEL HARVEY, PHOENIX, ARIZONA (1966)
- PRESENT/LAST OPERATOR A13: 4 BAR MINING COMPANY; VANCOUVER, BRITISH COLUMBIA (1968)
- EXPL./DEV.COMMENTS L110: PRESENTLY UNDER LEASE TO EXXON MINERALS CO.

DESCRIPTION OF DEPOSIT

- DEPOSIT TYPE(S) C40: STRATIFORM MASSIVE SULFIDE
- DEPOSIT FORM/SHAPE M10: LENSE
- DEPTH TO TOP M20: ; UNITS M21:
- DEPTH TO BOTTOM M30: 1500; UNITS M31: FT
- DEPOSIT SIZE M15(SMALL) M15(MEDIUM) M15(LARGE) (circle one) — circled: SMALL
- MAXIMUM LENGTH M40: 1500; UNITS M41: FT
- MAXIMUM WIDTH M50: 1500; UNITS M51: FT
- MAXIMUM THICKNESS M60: 100; UNITS M61: FT
- STRIKE M70: N 20 E
- DIP M80: 70 W AVERAGE
- DIRECTION OF PLUNGE M100: SOUTHWEST
- PLUNGE M90: 80 SW
- DEP. DESC. COMMENTS M110: TWO ORE BODIES: MAIN NEAR NO. 1 SHAFT; OTHER TO THE NORTH. MAIN ORE SHOOT IS 5 FEET WIDE ON 200 LEVEL, 18 FEET WIDE ON 350 LEVEL, 30 FEET WIDE ON 500 LEVEL, 35 FEET LONG ON 600 LEVEL, 26 FEET

DESCRIPTION OF WORKINGS

- Workings are: SURFACE M120 UNDERGROUND (M130) BOTH M140 (circle one) — circled: M130
- OVERALL LENGTH M190: 300; UNITS M191: FT
- OVERALL WIDTH M200: 60; UNITS M201: FT
- OVERALL AREA M210: 18000; UNITS M211: SQ FT
- DEPTH BELOW SURFACE M160: 1500; UNITS M161: FT
- LENGTH OF WORKINGS M170: 15045; UNITS M171: FT
- DESC. OF WORK. COM. M220: MAIN WORKINGS ON 600 LEVEL. APPARENTLY NO ORE WAS EVER PRODUCED FROM BELOW THE 350 LEVEL BEFORE THE 1940'S.

GEOLOGY

- *AGE OF HOST ROCK(S) K1: P,R,O,T, U/PB ZIRCON GREATER THAN 1720 MILLION YEARS
- *HOST ROCK TYPE(S) K1A: METARHYOLITE, METAANDESITE, QUARTZ-MICA SCHIST
- *AGE OF IGNEOUS ROCK(S) K2: P,R,O,T, U/PB ZIRCON GREATER THAN 1720 MILLION YEARS
- *IGNEOUS ROCK TYPE(S) K2A: METARHYOLITE, METAANDESITE
- *AGE OF MINERALIZATION K3: P,R,O,T,
- *PERT. MINERALS (NOT ORE) K4: QUARTZ, CHLORITE, SERICITE, DOLOMITE, SIDERITE, BARITE
- *ORE CONTROL/LOCUS K5: STRATIGRAPHY
- *MAJ. REG. TRENDS/STRUCT. N5: FOLIATION AND SOME BEDDING TREND N 20 E
- *TECTONIC SETTING N15:
- *SIGNIFICANT LOCAL STRUCT. N70: FOLIATION TRENDS N 20 E
- *SIGNIFICANT ALTERATION N75: CHLORITIZATION, SERICITIZATION
- *PROCESS OF CONC./ENRICH. N80: OXIDATION AT NEAR-SURFACE
- *FORMATION AGE N30: P,R,O,T, U/PB ZIRCON GREATER THAN 1720 MILLION YEARS
- *FORMATION NAME N30A: UNNAMED PRECAMBRIAN METAVOLCANIC UNITS
- SECOND FM AGE N35:
- SECOND FM NAME N35A:
- *IGNEOUS UNIT AGE N50: P,R,O,T, U/PB ZIRCON GREATER THAN 1720 MILLION YEARS
- *IGNEOUS UNIT NAME N50A: UNNAMED PRECAMBRIAN METAVOLCANIC UNITS
- SECOND IG. UNIT AGE N55:
- SECOND IG. UNIT NAME N55A:
- GEOLOGY COMMENTS N85: KAY MINE IS STRATIFORM MASSIVE SULFIDE DEPOSIT IN CHLORITIZED METARHYOLITE. THE COPPER GRADE OF THE KAY IS NOTABLY HIGH, RANGING FROM 5 TO 10 PERCENT.

GENERAL COMMENTS

GENERAL COMMENTS GEN:

* GENERAL REFERENCES

REFERENCE 1 F1 < US GEOL SURVEY BUL 182, p. 155

REFERENCE 2 F2 < ABGMT- USBM FILE DATA

REFERENCE 3 F3 < ABGMT CLIPPINGS FILE

REFERENCE 4 F4 < AZ BUR. OF MINERAL RESOURCES FILE DATA

M 110 < WIDE ON THE 1500 LEVEL. THE MAIN ORE BODY IS 70 FEET LONG ON THE 200 LEVEL, 110 FEET LONG ON THE 500 LEVEL, AND 170 FEET LONG ON THE 1500 LEVEL.
RESERVE ESTIMATES (AS OF 1930-1940) RANGE FROM APPROXIMATELY 180,000 TONS (JENKS, UNPUBLISHED) TO 320,000 TONS (LUNDQUIST, UNPUBLISHED) TO 1,900,000 TONS (ABGMT CLIPPINGS FILE, 1931) >

M 220 < MAIN, OR NO. 1 SHAFT, IS ON WEST SIDE OF AGUA FRIA RIVER, IN SECTION 4. THE MAIN SHAFT IS 600 FEET DEEP AND IS INCLINED 65 DEGREES TO THE WEST. THE MAIN SHAFT IS LOCATED ON THE MARIETTA PATENTED CLAIM
THE NO. 4 SHAFT IS ON THE EAST SIDE OF THE AGUA FRIA RIVER, IN SECTION 9. THE NO. 4 SHAFT IS 1500 FEET DEEP AND IS VERTICAL. IT IS LOCATED ON THE S.E. EXT. MARIETTA PATENTED CLAIM, 600 FEET SOUTHEAST OF THE MAIN SHAFT.
THE NO. 2 SHAFT IS 180 FEET DEEP AND IS 600 FEET NORTH OF THE MAIN SHAFT
THE NO. 3 SHAFT IS 520 FEET DEEP AND IS 2200 FEET NORTH OF THE MAIN SHAFT. >

F5 < AZ MINING JOURNAL, AUG 30, 1926, p. 9; AUG 15, 1925, p. 7-8, 39; NOV 1, 1924, p. 7-9; DEC 15, 1924, p. 5-7; APR, 1920, p. 16-17, 66; JUNE, 1919, p. 64. >

F6 < NORTHWEST MINER, MAY 2, 1919, p. 4-5 >

F7 < NORTHWEST MINING TRUTH, APR 18, 1919, p. 1 >

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

*RECORD NUMBER B10 <>
*RECORD TYPE B20 <X, 1, M>
DEPOSIT NUMBER B40 <>
REPORT DATE G1 <8, 1, 09> (YR. MO.)
*INFORMATION SOURCE B30 <1, 2>
*FILE LINK IDENT. B50 <USBM 004 025 1231>
*REPORTER(SUPERVISOR) G2 < DEWITT, ED, H > (last, first, middle initial) (last, first, middle initial)
*REPORTER AFFILIATION G5 < ABGMT >
*SITE NAME A10 < KAY COPPER MINE >
*SYNONYMS A11 <>

LOCATION

*MINING DISTRICT/AREA A30 < KAY DISTRICT >
*COUNTY A60 < YAVAPAI >
*STATE A50 < A, Z >
*COUNTRY A40 < U, S >
*PHYSIOGRAPHIC PROV A63 < 1, 2, >
*DRAINAGE AREA A62 < 1, 5, 0, 7, 0, 1, 0, 2, >
*LAND STATUS A64 < 0, 0, >
*QUADRANGLE NAME A90 < BLACK CANYON CITY , 1, 9, 6, 9, 1 >
*QUADRANGLE SCALE A100 < 2, 4, 0, 0, 0 >
SECOND QUAD NAME A92 < , 1 >
SECOND QUAD SCALE A91 <>
+ELEVATION A107 < 1, 9, 8, 0, F, T >

UTM

*NORTHING A120 < 3, 7, 6, 9, 2, 5, 0 >
*EASTING A130 < 3, 9, 2, 9, 7, 7 >
*ZONE NUMBER A110 < +, 1, 2 >

*ACCURACY

ACCURATE ACC (circle)
ESTIMATED EST <>

GEODETIC

*LATITUDE A70 < 3, 4, -, 0, 3, -, 3, 7, N >
*LONGITUDE A80 < 1, 1, 2, -, 0, 9, -, 3, 5, W >

CADASTRAL

*TOWNSHIP(S) A77 < 0, 0, 8, N >
*RANGE(S) A78 < 0, 0, 2, E >
*SECTION(S) A79 < 04 , 09 >
*SECTION FRACTION(S) A76 < SE OF SW ; NW OF NE AND NW >
*MERIDIAN(S) A81 < GILA AND SALT RIVER >

*DISTANCE FROM NEAREST PROMINENT LOCALITY A82 < 0.5 MILES SOUTHWEST OF BLACK CANYON CITY, ARIZONA >
*LOCATION COMMENTS A83 < KAY COPPER MINE GROUP CONSISTS OF 10 PATENTED CLAIMS THAT EXTEND ALONG THE AGUA FRIA RIVER FROM SECTION 4 TO SECTION 9. >

* ESSENTIAL INFORMATION
+ ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

KAY COPPER MINE
YAVAPAI COUNTY, ARIZONA

PROPERTY

Ten (10) Patented claims, Tip Top Mining District, Yavapai County, Arizona, on the Agua Fria River, near Rock Springs, (Canyon) Arizona.

ACCESSIBILITY

Fifty (50) miles from Phoenix on Black Canyon Road.
Thirty-Nine (39) miles from Marinette on Santa Fe Railway.
Twenty-Two (22) miles from Turkey Creek Station on the Humboldt branch of the Santa Fe Railway.

TOPOGRAPHY

The Kay lies on east flank of the Bradshaw Mountains at altitude of 1800 feet.

GENERAL GEOLOGY

Country rock is Pre-Cambrian chloritic schist and a schisted quartz porphyry, striking N 20°E and dipping 70° NW.

Some diorite outcrops to NE and SE of property, and diabase intrusives are encountered in underground workings.

ORE DEPOSITS

Ore occurs as lenses parallel to the schistocity and replaces portions of the schists. Mesothermal type ores are primary iron pyrite, copper pyrite and gray copper of deep seated origin and dependable in depth.

ORE RESERVES

	Positive	
By Arthur W. Jenks E. M.	70,793 Tons 5.01% Cu.,	Approx. $2.89 in gold and silver.
	Probable	
	103,476 Tons 3.57% Cu.,	Approx. $2.30 in gold and silver.
By John R. Poss E. M.	(215,000 Tons 4% Cu.) (81,000 Tons 3% Cu.)	Approx. $3.00 per ton in gold and silver

There is a very definite possibility of the development of many thousand of tons of ore in addition to that noted from records of mine workings, assay maps and geological conditions.

FINANCIAL OUTCOME TO BE EXPECTED

On present market the gross value of the ore in No. 1 Shaft (Arthur W. Jenks Estimate) is $10.05 per ton after making adjustments for mill recovery and smelting schedule payments, which, after deducting mining, milling, transportation, smelting, taxes, insurance and overhead totalling $7.06 per ton, leaves about $3.00 net operative profit per ton or a total out of the ore body of over $520,000.00.

NOTE

The Kay Copper Company expended into the millions of dollars on the development of this property, and there are many thousand of feet of underground development in shafts and drifts and in diamond-drill holes. Failure of the company was due to financial difficulties, market conditions and lack of proper program consistent with developments.

LETTER - JOHN R. POSS, former Superintendent of Kay Copper Mine, to L. E. FOSTER, regarding Water. Dated July 20, 1937.

"Regarding the water situation in No. 1 shaft and also No. 4 shaft, which you have referred to in your letter of July 17th. Comparatively little water flow will be encountered in the workings of the No. 1 shaft down to the 600 level. The de-watering operation will consist mainly of emptying the No. 1 workings, with which you are already familiar. The plan map of No. 1 workings will give you an approximation of the amount of water to be pumped. In addition to that, I don't believe you will have much inflow above the 600 level. We were able in the old days to keep the No. 1 workings dry with a small sinker pump in the sump below the 600 level, pumping, as I remember, about eight to ten hours out of the twenty-four. The capacity of the sinker, as I recall, was either one hundred or one hundred fifty gallons per minute. A good deal of this flow of water came from water courses which seemed to drain with a flow diminishing as time went on. Of course, as new headings were opened new water was encountered. But taking the present workings as they are in the No. 1 shaft, once they are de-watered I don't believe you will have much water to handle".

KAY COPPER MINE
YAVAPAI COUNTY, ARIZONA

MINE DUMPS

Surveys and preliminary sampling indicate the following tonnage of milling ore as available, -

#1 Dump	2,200 Tons	@ 2.10% Copper
#4 "	17,500 "	@ 1.30% "

Samples were taken by making small headings into the sides of dumps and small pot holes in the tops. No trench samples were taken.

Figuring conservatively as to costs, with a 50 tons capacity mill unit to handle material from dumps, roughing on tables and cleaning with flotation, there should be a net operative profit of about $25,000 in the dumps at present time.

Trench samples will have to be taken to determine exact tonnage available and average metal content, but, owing to the way mining was carried on, no shipments being made except for a limited tonnage from the #1 shaft, there is little doubt but that there are thousands of tons of low-grade milling ore in dumps, as no segregation of the ores encountered in development work was made to any extent. There are areas in the #4 dump that will run up as high as 5.0% copper.

December 30, 1939

KAY COPPER MINE
YAVAPAI COUNTY, ARIZONA

ESTIMATED RETURNS

Arthur W. Jenks Tonnage Estimate
Ore taken into consideration only that reached by #1 Shaft

70,793 Tons 5.01% Copper	7,093,458#	Copper
103,476 " 3.59% "	7,429,576#	"
	14,523,034#	"
Average Mill Recovery 95%	13,796,882#	"
Smelter Pays for 94% Recoverable Cu.	12,969,069#	"
Gross Return - Copper @ 12.50 #	$ 1,297,000	
Gold $32.31825 per oz)	455,000	
Silver @ 71¢ oz.)		
	1,752,000	
Total Mine, Mill and Smelting Costs @ $ 7.06 per ton ore	1,230,339	
NET OPERATIVE PROFIT	$ 521,661	

Estimate based on present market of 12.50¢ per # Cu.

L. E. Foster

L. E. Foster, E. M.

December 30, 1939

Present market 11.5¢ per # (Aug 3/40) which means "Net Operative Profit" will be about $400,000

L. E. FOSTER
Mining Engineer

Silver City, N. M.
Sept. 2, 1944.

DEPT. MINERAL RESOURCES
RECEIVED
SEP 5 1944
PHOENIX

Mr. C. P. Dunning, Director
Department of Mineral Resources
Home Builder's Bldg.
Phoenix, Arizona.

Dear Mr. Dunning:-

Would appreciate your signing approval of this application for renewal of "C" gas rationing card as Mr. Coupal has former renewals and mailing it to the Rationing Board.

I have been doing consulting and special operational mining work in Arizona, New Mexico and Texas, and am as part owner of the Kay Copper mine near Rock Springs, Arizona, endeavoring to get it reopened and in production.

Am doing some special operational work here in Silver City and will not be able to get to Phoenix to see you personally regarding this matter, for the next few weeks, hence my request.

Would refer you to Mr. Coupal, Mr. Charles F. Willis of the Mining Journal and to Ed Gollwitzer of Pratt Gilbert Hardware Company as to my mining work.

Thanking you in advance for any courtesy you may extend

Yours sincerely

L. E. Foster

L. E. Foster
P.O.Bx. #776, Phoenix, Arizona.

Present address:-
802 Black St., Silver City, N. M.

August 2, 1944

War Price and Rationing Board
No. 81.7.1
137 No. 2nd Avenue
Phoenix, Arizona

Gentlemen:

Mr. A. W. Amos is one of the principal owners of the Kay Copper Mine situated about 50 miles north of Phoenix on the Black Canyon Road.

He needs to make frequent trips to this mine.

We recommend that the gas allowed him for this purpose in the past be continued.

Yours very truly,

Chas. H. Dunning
Director

CHD:LP

File: RDD April 29, 1944

Office of Price Administration
War Price and Rationing Board
Ellis Building
Phoenix, Arizona

Gentlemen:

Mr. A. W. Amos, Route 3, Box 299, Phoenix, is the owner of the Kay Copper Mine, located on the Black Canyon Road about 50 miles northerly from Phoenix and is making for supplemental gasoline. The Kay Copper is one of the well developed properties in that area and preliminary work is being undertaken which calls for about one trip a month, so I can certify as to the need of four hundred miles a month to take care of this work, copper being one of the critical war minerals.

In addition to this, Mr. Amos carries on certain ranch work on Lateral 21, North of Christy Road and for this work requires an additional two hundred miles a month.

Very truly yours,

J. S. Coupal, Director

JSC:JES

Jan. 10, 1944

DEPT. MINERAL RESOURCES
RECEIVED
JAN 13 1944
PHOENIX, ARIZONA

SUBJECT: Kay Copper Company premium
Willis' memo Jan 6, 1944

C

I have been keping an eye on this application since it was filed.

I am surprised at your statement that they want the premium for a dump operation. I can find nothing in the application to support this assertion.

They state they want to work in the mine and it will take a considerable amount of capital.

The WPB does not think it warrants government money, and they also feel that they should not encourage with government premium money private investment in a copper venture of this sort at this time considering all the circumstances. I have not been able to convince them otherwise and, indeed, theyhave a point. It might not be fair to the investor.

If Kay wants this for a dump operation and, particularly, if the dump will ship siliceous ore the need for which can be supported by a letter of necessity from a smelter, they might have a chance if they would modify their application so that it may be considered an extension of the present application (to get under the deadline of Dec. 31st).

Bill Broadgate

Dear Charlie;

Your memo regarding Bureau of Mine releases. I send these as soon as I can get them. The papers always get the releases several days before I can.... that is, the wire services get them released direct and others are mailed out later.

Bill

DEPT. MINERAL RESOURCES
RECEIVED
AUG 24 1943
PHOENIX ARIZONA

Aug. 22, 1943

SUBJECT: Kay Copper
Willis memo of Aug. 20

As you know we have had some exchange of memos on this with the office previously.

I informed you of the Bureau of Mines proposal some time ago.

It will be interesting to know what their recommendation may be.

However, as for the $100,000 proposal for unwatering, retimbering, development work and mill construction, they may just as well forget it in the present temper of King and Moulton, as there is not a ghost of a chance to get it approved.

An ~~KKK~~ RFC proposal amounting to $16,000, is another matter, as, being below $40,000, WPB should not concern itself with the application.

It is possible that, with such a loan a special increased premium might be obtained to help in the actual mining.

Bill Broadgate

August 16, 1943

War Price and Rationing Board
No. 8171
137 North Second Avenue
Phoenix

Gentlemen:

Mr. A. W. Amos is opening a copper mine known as the Kay Copper Company property, located at Rock Springs some 50 miles north of Phoenix on Black Canyon Highway.

He is preparing this mine for an R. F. C. loan which is being filed at once.

This mine is a potentially large producer of copper and, under the direction of Mr. Amos and his associate, Mr. L. E. Foster, will be in production within the next 90 days.

Mr. Amos is applying for the additional gasoline quota which will be necessary to efficient management of this property.

Very truly yours,

George A. Ballam
Assistant to the Director

GAB:JE

Washington, D.C.
July 21, 1943

DEPT. MINERAL RESOURCES
RECEIVED
JUL 23 1943
PHOENIX ARIZONA

SUBJECT: Kay Copper Co
Willis Memo, July 19, 1943

There seems to be considerable question if this property will warrant the cost of opening up, with the chances of if being caved, considering the length of time it may take to get it into substantial production and the fact that considerable plant and mill will likewise be required, in the opinion of the production section WPB. However, this is not a decision, merely a preliminary opinion.

The Bureau of Mines has been asked to survey the situation with view to making WPB a recommendation and estimate of cost to unwater and sample.

I doubt that RFC would undertake such a deal without WPB approval, considering the possible magnitude.

WPB realizes that there is some highgrade copper ore available in the Kay, but at considerable depth.

The time element is a consideration of importance in this case.

Bill Broadgate

Washington, D.C.
June 17, 1943

DEPT. MINERAL RESOURCES
RECEIVED
JUN 21 1943
PHOENIX ARIZONA

SUBJECT: Kay Copper
L. E. Foster

As far as I can find out, all Foster has asked for is a higher copper premium, and this is now in process.

No one seems to know anything about a loan application.

Bill Broadgate

May 25, 1942

KAY MINE

Mr. A. W. Amos
Rt. 3, Box 299
Phoenix, Arizona

Dear Mr. Amos:

I have a Memo from Mr. Charles F. Willis relative to your discussion with him on the Kay mine.

Due to the fact that the present rulings of the RFC mine loan division on development loans is such that they will not unwater a mine, it would be useless to apply for a development loan.

Recently the U. S. Bureau of Mines, Ed Gardner, supervising engineer, at University Station, Tucson, has advised us of a fund for the development of promising properties. I would submit my data to him, and it might be possible that one of his engineers will examine the jproperty.

I would further suggest that you state to him your problem. It might be that the U. S. Bureau of Mines would consider some work to prove up the ore body in depth, and at the same time, it might be that they would not consider the unwatering of the mine.

Very truly yours,

J. S. Coupal, Director

JSC:GS

June 20, 1941

Mr. L. E. Foster
P. O. Box 776
Phoenix, Arizona

Dear Mr. Foster:

Many thanks for the return of the second questionnaire. I believe that we now have all the information that we need to present in our report regarding the Kay Copper Company.

We are really quite hopeful that we can get some results on getting the smaller marginal copper mines working. Of course, it is going to take time but we are under way.

With kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors
Arizona Department of Mineral Resources

CFW:LP

June 11, 1941

Mr. L. E. Foster
P. O. Box 776
Phoenix, Arizona

Dear Mr. Foster:

Many thanks for filling out the questionnaire on the Kay Copper Mine and it is very evident that this mine will be included in the report that we are to make to the government on potential copper producers.

Included within this report we anticipate putting a brief description of the properties which will be listed as potential producers. In order to have these brief reports uniform in their contents we have gotten up another questionnaire showing the points we want to cover, and it will be greatly appreciated if you will fill in one of these questionnaires for the Kay Copper Mine and return it to us.

Thanking you for an early reply, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors
Arizona Department of Mineral Resources

CFW:LP
Enc.

September 5, 1944

File: CCDD

War Price and Rationing Board
No. 81.7.1
137 North Second Avenue
Phoenix, Arizona

Gentlemen:

Mr. L. E. Foster, Box 776, Phoenix, is making application for renewal of C gas rationing card.

Mr. Foster is a mining engineer, at present engaged in special operational work in Silver City, New Mexico, and also part owner of the Kay Copper Mine some 50 miles north of Phoenix to which he expects to return when his consulting work in New Mexico is completed.

It is recommended that this application be given favorable consideration.

Yours very truly,

George A. Ballam
Assistant to the Director

GAB:LP

December 20, 1945

Mr. L. E. Foster
802 Black Street
Silver City, New Mexico

Dear Mr. Foster:

We have your letter of December 9 in regard to the Kay Mine.

I wish that we could help you, but most all those who are able seem to think the copper situation is too uncertain to risk any financing at present.

We are not so pessimistic in this office and feel that when the premiums and ceiling are removed, there will be a good demand for copper around 14 - 15 cents. But of course much depends on what action is taken in Washington on tariffs, stockpiling, etc.

If we can be of any assistance to you, please feel free to call upon us.

Yours very truly,

Chas. H. Dunning
Director

CHD:LP

THOMAS S. DAVEY

CONSULTING MINING ENGINEER

Rt.1, Box 465
Grass Valley, Cal.
Jan. 9 th. 1951.

Mr. Chas. H. Dunning, Director
Dept. of Mineral Resources
State of Arizona
Phoenix. Arizona.

Dear Mr. Dunning;-

I thank you for the information of Dec. 27th. relative to the Kay Copper and I have written Mr. Farnham concerning the Bluebell.

With reference to my reaction on the Kay Copper, at the time I took charge of the property the main vertical shaft was down to about the 1000 ft. level and was continued to the 1200 as per previously arranged contract. Thereupon the shaft contract was ended and drifting undertaken on the 300 and 600 levels, north, continuing the work done by former operators. This work was done under the individual bonus system and diamond-drilling by contract from both sides of these drifts at various plus and minus angles.

A raise was also put up from the 1200 level to the 600 to supplement the shaft for both ventilation and the provide additional development facilities. And it was my intention to drift south from the main shaft on the 300, 600 and 900 and also to connect the shaft and raise at this elevation for the purpose of disclosing the potentialities of the mine at these horizons before going deeper but the insistence of the New York office that deeper work be undertaken, on the basis of a prolix report by a prominent geologist, forced us into an expensive and unsuccessful program of sinking an inclined winze and diamond-drilling to the 1800 horizon.

In all we accomplished some 4500 feet of drifting, raising, crosscutting and sinking at the Kay in addition to some 8500 feet of diamond-drilling without being successful in finding only scattered patches of mineable ore. Nevertheless it was and still is, my opinion that more intensive drilling and development primarily above the 1200 level, is warranted.

Without going into too much detail, the foregoing will give you my impression of the property and the matter may be considered one of unfinished development. More power therefore to the Shattuck Denn in their undertaking in which they are welcome to any information I may have should they so desire.

Sincerely yours

T.S. Davey

P.S.

For your information, my resignation was due to the matter referred to in the third paragraph.

TSD.

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date: Dec 12 1944

Name of Mine: Ray Copper

Owner or Operator: W E Foster

Address: Box 776 Phoenix

Mine Location: Black Canyon

Filing Information

File System:

File No.:

This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development ✓; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip ✓;

Other (specify).....

PRODUCTION: **Past and Future.**

	Tons
Approx. tons last 3 months	
Approx. present rate per 3 months	
Anticipated rate next 3 months	
If in distant future check (X) here	

EQUIPMENT OPERATED:

Type	Quantity or Horse Power	Miles ~~or Hours~~ Per Month	Gallons Required Per Month
Personal Cars	1	1500	68
Light or Service Trucks			
Ore Hauling Trucks			
Compressors			
Other Mine or Mill Eqpt.			

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

REMARKS:

Mr Foster is owner and [illegible] of the Ray Copper property [illegible]

Discontinued [illegible] allowed to get fuel [illegible]

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By: A. C. Wheeler

Field Engineer D. of M. R.

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date: 12-15-1942

Name of Mine: Roy Gilpin

Owner or Operator: E. H. Morse

Address: Rt 3 Box 299 Phoenix

Mine Location: 50 miles east of Phoenix on Black Canyon

Filing Information

File System.....

File No.....

This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development.....; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip ✓;

Other (specify).....

PRODUCTION: **Past and Future.**

	Tons
Approx. tons last 3 months	
Approx. present rate per 3 months	
Anticipated rate next 3 months	
If in distant future check (X) here	X

EQUIPMENT OPERATED:

Type	Quantity or Horse Power	Miles or Hours Per Month	Gallons Required Per Month
Personal Cars	✓	450	35
Light or Service Trucks			
Ore Hauling Trucks			
Compressors			
Other Mine or Mill Eqpt.			

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

REMARKS:

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By Chas. H. Mauzey

KAY COPPER

ORE RESERVES

	Tons	Cu %	Lbs. Cu
Positive ore:	70,793	5.10	722,066
Probable ore:	103,476	3.57	738,818

PAST PRODUCTION:

Year	Tons	Au, ozs.	Ag, ozs.	Cu. %	Lbs. Cu
—	475	0.068	1.14	9.04	12,656

PRODUCTION POSSIBILITIES

14¢	16¢	18¢	20¢
900,000	✓	✓	2,000,000

CAPITAL INVESTMENT

14¢	16¢	18¢	20¢
50-T. Mill = $ 50,000	✓	✓ X-Ton mill =	$ 150,000

TIME REQ. TO START PROD.

14¢	16¢	18¢	20¢
3 months	✓	✓	4 months

Note:—
No other data in hand books.

Eng.

KAY COPPER CO.

Arizona Department of Mineral Resources, Capitol Building, Phoenix, Arizona

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property.....Kay Copper Mine.....

Location..Rock Springs (Canyon) Arizona.....

Ownership..Individual.....

Name of Manager.....L. E. Foster.....

Post Office address...P.O. Box # 776 Phoenix Arizona.....

Copper production (pounds) during each of the past five years:

1936.....None..... 1937....None..... 1938...None.....

1939.....None..... 1940....None.....

1941 rate of copper production based upon first four months.....

How much copper could this property produce annually

on a 14 cent price? ...900,000#.....

on a 16 cent price? .....

on an 18 cent price?.....

on a 20 cent price? ..2,000,000#.....

What price copper is necessary for this property? ....14.....cents per pound?

What plant facilities would be required and how much is the estimated cost in the event a 14 cent price could be assured? Mine equipt — 50 Ton Mill.....

..estimated cost — $50,000 — including preliminary operating fund

a 16 cent price could be assured? .....

.....

18 cent price? .....

.....

20 cent price? .....

.....$150,000.00.....

For what length of time would assurance of price and sale of full production be necessary? ...3 years.....

(over)

How long would it take, after financing has been provided for, before production on the above basis could be reached? ....90 Days.....

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? ....No.....

If not, do you believe that your company would be amenable and agreeable to government financing? ..Yes - If red tape + inefficient supervision eliminated.

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? ...Unable to State.....

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes.....
..Fine and dandy if finances can be arranged.....

What would be your ideas on financing and carrying out such a plan as is indicated by these questions? Will give mortgage on property for finances - or enter into participation agreement.....

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey.....

Date June 9/1941 Signed [illegible]

23: Country rock is Pre-C[illegible]rian chloritic schist and [illegible] schisted quartz porphyry, striking N 20° E and dipping 70° W. Some diorite outcrops to NE and SE of

23. Geology & Mineralization property, and diabase intrusives are encountered in underground workings. Ore occurs as lenses parallel to the schistocity and replaces portions of the schists. Mesothermal type ores are primary iron pyrite, copper pyrite and gray copper of deep seated origin and dependable in depth.

24. Ore: Positive & Probable, Ore Dumps, Tailings

By Arthur W. Jenks E. M.

Positive Ore

70,793 Tons 5,01% Cu.,Approx $2.89 in gold & Silver

Probable Ore

103,476 Tons 3.57% Cu.,Approx.$2.30 in gold & silver

24A. ~~Dimensions and Value of Ore body~~ There is a very definite possibility of the development of many thousands of tons of ore in addition to that noted from records of mine workings, assay maps and geological conditions.

25. Mine, Mill Equipment & Flow-Sheet No equipment

26. Road Conditions, Route Refer to #2

27. Water Supply Agua Fria River runs across property and has surface water most of the year. Undergravel water all year in considerable quantities. Also mine workings make considerable water at depth.

28. Brief History The Kay Copper Company expended into the millions of dollars on the development of this property, and there are many thousand of feet of underground development in shafts and drifts and in diamond-drill holes. Failure of the company was due to financial difficulties, market conditions and lack of proper program consistent with developments.

29. Special Problems, Reports Filed Financial only

30. Remarks

31. If property for sale: Price, terms and address to negotiate. Property can be handled in three ways; #1, Sale under lease and option;#2, 50% interest to be deeded for funds to be used exclusively for dewatering property and putting on production; #3, Mortgage will be given on entire property to cover a loan of sufficient size to dewater and put mine in operation and a reasonable interest in property will be given for the loan.

32. Signature E. Fuller Eng.

Consulting Mining Eng.

P.O. Box 776 Phoenix Ariz.

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

MINE OWNER'S REPORT

Date August 5, 1940

1. Mine Kay Copper Mine

2. Location 50 Miles from Phoenix on Blac
Canyon Road.
39 Miles from Marinette on Santa F
22 Miles from Turkey Creek Statior
Humbodlt branch Santa Fe RR.

3. Mining District & County Tip Top Mining District
Yavapai County

4. Former name Kay Copper Co. Kay Copper Corp.
Listed on Curb Stock Exchange years ago.

5. Owner L.E.Foster E.M. Consulting Mining Eng. ~~Address (Owner)~~ Box #776,Phoenix,Ariz
O.W.Judd,Steam & Mechanical Engineer. Tempe, Arizona

~~7. Operator~~ A.W.Amos, Christy Rd. Phoenix,Ariz ~~8. Address (Operator)~~

~~9. President Owning Co.~~

~~9A. President Operating Co.~~

~~10. Gen. Mgr.~~

14. Principal Minerals Copper, gold and silve

~~11. Mine Supt.~~

15. ~~Production Rate~~

~~12. Mill Supt.~~

16. Mill: Type & Cap. Metallurgical tests sh
a high recovery of all metals can b
made by gravity and
flotation methods with a very low c

~~17. Power Amt. & Type~~

13. Men Employed None

18. Operations: Present None

19. Operations: Planned None until property financed, then dewater, repair mine workin
check ore developed, erect mill unit and produce.

20. Number Claims, Title, etc. 10 patented claims. Title rests in A. W. Amos, O. W. Juc
and L. E. Foster

21. Description: Topography & Geography The Kay lies on east flank of the Bradshaw
Mountains at altitude of 1800 feet, in the Black Canyon and Agua Fria drainage
areas.

22. Mine Workings: Amt. & Condition Many thousands of feet of shafts, drifting and
diamond drill holes, at present time under water.

(over)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

MK-9

OWNERS MINE REPORT

Date August 5, 1940

1. Mine Kay Copper Mine

2. Mining District & County Tip Top Mng. Dist., Yavapai County

3. Former name Kay Copper Co., Kay Copper Corp. Listed on Curb Stock Exchange years ago.

4. Location 50 miles from Phoenix on Black Canyon Road. 39 miles from Marinette on Santa Fe R.R. 22 miles from Turkey Creek Station on Humboldt branch Santa Fe

5. Owner L. E. Foster, E.M., Const. Mng. Eng., O. W. Judd, Stm. & Mech.Eng.& A.W. Amos

6. Address (Owner) Box 776, Phoenix,Ariz. RR. Tempe, Arizona

7. Operator

8. ~~Address (Operator)~~ Box 299, Phoenix, Ariz.

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals Copper, gold & silver

14. Men Employed None

15. Production Rate

16. Mill: Type & Cap. Metallurgical tests show a high recovery of all metals can be made by gravity and floatation methods with a very low cost.

17. Power: Amt. & Type

18. Operations: Present None

19. Operations Planned None until property financed, then dewater, repair mine workings, check ore developed, erect mill unit and produce.

20. Number Claims, Title, etc. 10 patented claims. Title rests in A. W. Amos, O. W. Judd and L. E. Foster.

21. Description: Topography & Geography The Kay lies on east flank of the Bradshaw Mountains at altitude of 1800 feet, in the Black Canyon and Agua Fria drainage areas.

22. Mine Workings: Amt. & Condition Many thousands of feet of shafts, drifting and diamond drill holes, at present time under water.

(over)

23. Geology & Mineralization C. ntry rock is Pre-Cambrian chlor. .c schist and a schisted quartz porphyry striking N 20° E and dipping 70° W. Some diorite outcrops to NE and SE of property and diabase intrusives are encountered in underground workings. Ore occurs as lenses parallel to the schistocity and replaces portions of the schists. Mesothermal type ores are primary iron pyrite, copper pyrite and gray copper of deep seated origin and dependable in depth.

24. Ore: Positive & Probable, Ore Dumps, Tailings

Positive Ore

70,793 tons 5.01% Cu., approx $2.89 in gold & silver

Probable Ore

103,476 tons 3.57% Cu., approx. $2.30 in gold & silver

24. ~~Average Width, Length, Value~~ There is a very definite possibility of the development of many thousands of tons of ore in addition to that noted from records of mine workings, assay maps and geological conditions.

25. Mine, Mill Equipment & Flow Sheet No equipment.

26. Road Conditions, Route Refer to #2

27. Water Supply Agua Fria River runs across property and has surface water most of the year. Under gravel water all year in considerable quantities. Also mine workings make a considerable water at depth.

28. Brief History .The Kay Copper Company expended into the millions of dollars on the development of this property, and there are many thousand of feet of underground development in shafts and drifts and in diamond-drill holes. Failure of the company was due to financial difficulties, market conditions and lack of proper program consistent with developments.

29. Special Problems, Reports Filed Financial only.

30. Remarks

31. If property for sale: Price, terms and address to negotiate. Property can be handled in three ways: #1. Sale under lease and option. #2. 50% interest to be deeded for funds to be used exclusively for dewatering property and putting on production; #3. Mortgage will be given on entire property to cover a loan of sufficient size to dewater and put mine in operation and a reasonable interest in property will be given for the loan.

32. Signed L. E. FOSTER, E. M.
Consulting Mining Engineer
P.O. Box 776, Phoenix, Arizona

33. Use additional sheets if necessary.

ARIZO EPARTMENT OF MINERAL RESOURCE
Capitol Building, Phoenix, Arizona

Name of property. KAY COPPER MINE

Location and accessibility of property. Fifty miles from Phoenix on the Black Canyon Highway - Thirty Nine miles from Marinette, Arizona on the Santa Fe Railway over graded road. - Twenty two miles from Turkey Creek Station on the Humboldt, Arizona, branch of the Santa Fe Railway over graded road. Tiptop Mining District, Yavapai Co., Arizona.

The Kay lies on the east flank of the Bradshaw Mountains at an altitude of 1800' in the Aqua Fria drainage area.

History of ownership.

Formerly owned by the Kay Copper Company/ Kay Copper Corporation, the stock of the corporation was listed on the New York Curb Stock Exchange. Many thousand of feet of vertical and horizontal development and diamond-drilling, costing into the million of dollars. Failure of these companies was due to financial difficulties, market conditions and lack of proper development and operative program conisitent with geological developments.

Property now owned by L. E. Foster, Consulting Mining Engineer, O. W. Judd, Steam and Mechanical Engineer, and A. W. Amos Sr.

Production history. Company records show test shipments of 470 tons of ore to smelters averaging Copper 9.04%, Silver 1.14 Oz., Gold 0.068 Oz. per ton.

Prior to the Kay Copper Company taking over property there was a small tonnage shipt by former owners but no record is available of the results of such shipments.

The Kay Copper Company-/-Kay Copper Corporation carried on extensive development work figuring on making the property a very large tonnage producer but got in financial difficulties before arriving at definite plans for production.

General geology (brief) Country rock is Pre-Cambrian chloritic schist and a schisted quartz porphyry, striking N.20° E. and dipping 70° N.W. Some diorite outcrops to the N.E. and S.E. of the property and diabase intrusives are encountered in underground workings.

Ore occurs as lenses parallel to the schistpcity and repalces portions of the schists/

Ore occurrence. Ore -deposits are mesothermal type lenses in the schist showing considerable replacement. Ore minerals are iron pyrites, copper pyrites and gray copper sulphides(primary) with quartz and carbonates.

Ore reserve (quantities and values).

Estimate Arthur W. Jenks. E. M.

Positive Ore-70,793 Tons averaging 5.1% Copper

Probable Ore-103,476 Tons averaging 3.57% copper

All ore carry gold and silver from $2.50 to $3.00 per ton

Considerable development work was carried on after this estimate was made but final company estimate of tonnage not available

Accessory metals of value. Gold and silver from $2.50 to $3.00 per ton.

Development work done. Many thousand of feet of vertical and horizontal underground workings and diamond drill holes. Deepest workings 1,500' Development costs ran over a million dollars.

Plants (with capacity) already on property. None - Mine will have to be re-equipt and mill constructed before any production can be made

Date June 18/41 Signed L. E. Foster

L. E. Foster
P.O.Box#776, Phoenix, Arizona.

November 10, 1951

GEOLOGICAL PROGRESS REPORT FOR OCTOBER, 1951

KAY COPPER MINE

YAVAPAI COUNTY, ARIZONA

Official participation of The New Jersey Zinc Exploration Company with Shattuck Denn Corporation began at the Kay Copper Mine on October 5, 1951. Shortly after that date Messrs. Jerome and Johnston placed location paper for 8 claims to protect the Kay workings and to cover some of the more obvious projected possibilities. Ground covered is shown on the accompanying map.

A base line and 5 grid lines were cut for eventual geophysical surveys. Total footage represented is about 17,000 feet.

On October 14 diamond drill hole Z-1 was begun from 801 drift. It was drilled at ∓ 3 degrees N. 84° W. and terminated at 215 feet on October 31. A brief log of pertinent data concerning this hole is given below. Assays are of split core. Wall rock recovery was exceedingly poor; contrary to usual diamond drilling experience, core recovery in the mineralized zone was almost 100 percent.

Sample No.	Remarks	Footage	Distance	Split Core Assays Zn.	Ag.	Zn.	Pb.	Cu.
-	Wall rock	0 - 105½	105½°	-	-	-	-	-
K-1	Ground core	105½-107	1½°	.02	0.4	.35	.04	.03
K-2	Diss. Sulphide	107-109	2°	.03	0.0	1.9	.04	.53
K-3	Mass. "	109-115	6°	.12	1.0	3.7	0.2	1.3
K-4	" "	115-122	7°	.07	0.3	3.1	Nil	1.0
K-5	Diss. "	122-123 3/4	1 3/4°	.03	0.0	1.8	.04	.19
K-6	" "	123 3/4-130½	6 3/4°	.01	0.5	0.9	Tr.	.03
K-7	" "	130½-138½	8°	.02	1.0	1.1	Tr.	.4
K-8	" "	138½-143½	5°	.03	0.5	0.4	.04	0.4
-	Wall rock	143½-145	1½°	-	-	-	-	-
K-9	Mass. Sulphide	145-150	5°	.01	0.6	1.45	.26	.09
K-10	Diss. "	150-158	8°	Tr.	0.4	0.1	0.1	.05
K-11	Mass. "	158-165	7°	.02	0.4	3.2	.04	.17
-	Wall rock	165-168½	3½°	-	-	-	-	-
K-12	Diss. Sulphide	168½-176	7½°	.02	0.0	0.1	Nil	1.13
K-13	" "	176-177 3/4	1 3/4°	Tr.	0.2	3.1	Nil	.14
K-14	Mass. "	177 3/4-183 3/4	6°	.04	1.0	0.7	Nil	1.04
K-15	" "	183 3/4-190 3/4	7°	Results not available				
-	Wall rock	190 3/4-215 Bottom	24¼°	-	-	-	-	-

The New Jersey Zinc Exploration Company

Kay Copper Mine, Inc Co

SUMMARIZED LOGS OF AVAILABLE ASSAYS

Hole No.	Distance	Footage	True Width	Comment	Sample No.	Split Core Assays Au.	Ag.	Zn.	Pb.	Cu.
Z-1 800' level	183 3/4-190 3/4	7'	7'(-)	Diss. mass. sulphide	K-15	0.07	0.5	3.5	0.2	0.27
Z-2 260 level	0 - 3'	3'	-	Wall rock	-	-	-	-	-	-
	3 - 10'	7'	7'(-)	Diss. sulphide	K-42	0.04	0.3	1.3	0.1	0.32
	10'-120' bottom	110	-	Wall rock	-	-	-	-	-	-
Z-3 260 level	0 - 44	44'	-	Wall rock	-	-	-	-	-	
	44 - 48'	4'	2'(+)	Diss. mass. sulphide	K-43	0.03	0.8	1.7	Tr.	0.92
	48 - 60	12'	6'(+)	Diss. sulphide	K-44	0.06	2.3	2.2	0.3	3.04
	60 - 198 Bottom	138'	-	Wall rock	-	-	-	-	-	-
Z-4 500 level	0 - 69	69'	-	Wall rock	-	-	-	-	-	-
	69 - 76	7'	7'(-)	Sl. diss. Sul.	K-45	Tr.	0.2	0.2	Tr.	0.07
	76 - 87½	11½'	-	Wall rock	-	-	-	-	-	-
	87½ -93	5½'	5½'(-)	Diss. sulphide	K-46	0.01	0.2	0.2	Nil	0.30
	93 - 156½	63½'	-	Wall rock	-	-	-	-	-	-
	156½ - 160	3½'	3½'(-)	Diss. sulphide	K-47	Tr.	0.1	2.0	0.2	0.70
	160 - 165	5'	5'(-)	Diss. sulphide	K-48	0.04	0.3	7.3	0.4	0.33
	165-197	32'	-	Wall rock	-	-	-	-	-	-
	197 - 200	3'	3'(-)	Sl. diss. sulphide	K-49	Tr.	Tr.	1.0	0.1	0.19
	200 - 202	2'	-	Wall rock	-	-	-	-	-	
	202 - 207	5'	5'(-)	Diss. sulphide	K-50	0.03	0.5	1.3	0.1	1
	207 - 236½	29½	-	Wall rock	-	-	-	-	-	-
	236½ - 241	4½	4½'(?)	Mass. sulphide	K-51	0.13	0.7	3.0	0.2	0.42
	241 - 280 Bottom	39'	-	Wall rock	-	-	-	-	-	-
Z-5 500 level in progress	0 - 88	88'	-	Wall rock	-	-	-	-	-	-
	88 - 90½	2½'	1½'(+)	Diss. sulphide	-	Not	yet	split		
	90½ - 115	24½	-	Wall rock	-	"	"	"		
	115 - 117	2	1'(+)	Mass. sulphide		"	"	"		
	117 - 143	26	-	Wall rock						
	143 - 149	6	3'(+)	Diss. mass. sulphide		"	"	"		
	149 - 160	11	-	Wall rock						

Kay Copper Mine Year Co

SUMMARIZED LOGS AND AVAILABLE ASSAYS

Hole	Distance	Footage	True Width	Comment	Sample No.	Split Core Assay Au.	Ag.	Zn.	Pb.	Cu.
Z-5 5th L.	140-149'	1½	1'	Massive Sulfide	K-99	.06	2.0	4.0	1.8	.19
	161-164½	3½		Wall rock	Nov.	–	—			
	164-173½	9	4½	Dis. Ms. Sul.	K-100	.03	0.3	1.9	0.1	.20
	173½-203½	30	–	Wall rock.						
	203½-206½	3	1½	Dis. Mass. Sul.	K101	.07	2.4	6.1	2.8	.12
	206½-280	73½	–	Wall rock	–	–	–			
	Bottom.									
Z-6 800 Level	0-3	3	3	Dis Sul.	K 102	.02	0.3	0.5	Nil	3.07
	3-115½	112½	–	Wall Rock		—				
	115½-117	1½	1½	Diss. Sul		Not split				
	117-280	83		Wall Rock						
	Bottom									
Z-7 800 Lev.	0 - 86	86	–	Wall Rock		—				
	86-90	4	4 (-)	Dis. Mass Sulf.	K 103	.01	Tr.	1.9	0.5	0.14
	90-146½	56½	–	Wall Rock						
	146½-147½	1	1 (-)	Dis. Mass Sulf.		Not Split				
	147½-200	52½	–	Wall Rock						
	Bottom									
Z-8 1200 L.	0 - 16	16	–	Wall Rock						
	16-19½	3½	3½	Mass Sul.	K-104	.06	1.2	4.5	0.6	1.32
	19½-20½	1	–	Wall Rock		—				
	20½-30½	10	10	Diss Sul	K-105	.03	0.6	2.3	0.3	0.18
	30½-36½	6	6	Mass Sulf.	K-;06	.12	1.1	5.5	0.8	1.14
	36½-38½	2	–	Wall Rock		—				
	38½-45	6½	6½	Diss. Mass Sulf	K-107	.14	2.3	2.9	0.3	1.20
	45 -47½	2½	2½	Diss. Sulf.	K-108	.01	0.8	1.2	1.8	0.14
	47½-54½	7	7	Wall Rock		—				
	54½-60	5½	5½	Diss Mass Sulf	K-109	.11	0.2	5.3	Tr	0.32
	60 -65½	5½	5½	Diss. Sulf.	K-110	.01	Tr.	2.1	Nil	0.09
	65½-70	4½	–	Wall Rock		—				
	Bottom									
Z-9 1200 L.	0 - 46	–		Wall Rock						
	46 - 48	2	2	Dis Mass Sul.	K-111	.03	0.8	0.8	0.1	0.76
	48 - 52½	4½		Wall Rock		—				
	52½-58	5½	5½	Dis. Sulf.	K-112	.04	1.0	3.2	1.2	0.76
	58 63	5		Wall Rock						
	63 -65	2	2	Dis Sul		Not Split				
	65 - 72	7	7	Dis Mas Sul	K-113	.03	2.6	1.4	0.4	0.10
	72 -77	5	5	Dis Sul	K-114	.02	0.5	2.5	0.4	0.03
	77 -86½	9½	9½	Dis Sul	K-115	.04	1.0	5.4	0.5	.04
	86½-125	38½	–	Wall Rock						
	Bottom									

Kay Copper Mine Syn-Co

KAY COPPER MINE

CONTAGRESS LOGS AND AVAILABLE ASSAYS

Hole No.	Distance	Footage	True Width	Country	Sample No.	Au.	Ag.	Zn.	Pb.	Cu.
						Split	Core	Assays		
Z-12	35-43'	8'	5' (-)	Sl. Dis. Sul.	K-156	0.03	0.5	0.7	Nil	0.20
1200	43-51'	8'	5' (-)	Sl. Dis. Sul.	K-157	0.04	0.9	1.0	0.14	0.24
Level	51-58½'	7½'	4½ (-)	Sl. Dis. Sul.	K-158	0.03	1.0	0.8	Nil	0.20
	58½-67'	8½'	3' (-)	Sl. Dis. Sul.	K-159	0.03	1.0	1.6	0.7	0.33
	Bottom @ 67	In Drocmber								
Z-13	0-4'	4'	4' (-)	Sl. Dis. Sul.	K-160	0.01	0.5	1.7	0.4	1.08
1200	4-7'	3'	3' (-)	Sl. Dis. Sul.	K-161	0.07	0.7	1.7	0.5	0.35
Level	7-16'	9'	9' (-)	Mass. Sul.	K-162	0.07	3.1	3.1	0.8	0.07
	16-42'	26'	--	Wall Rock	-	-	-	-	-	--
	42-51'	9'	9' (-)	Sl. Dis. Sul.	K-163	0.02	0.4	0.6	Nil	0.21
	51-94'	43'	--	Wall Rock	-	-	-	-	-	--
	94-102'	8'	8' (-)	Sl. Dis. Sul.	K-164	0.01	0.2	0.5	Nil	1.29
	102-111'	9'	9' (-)	Sl. Dis. Sul.	K-165	0.02	0.3	0.4	Nil	0.48
	111-116'	5'	5' (-)	Sl. Dis. Sul.	K-166	0.01	0.3	Tr.	0.1	0.68
	116-125'	9'	9' (-)	Sl. Dis. Sul.	K-167	0.02	0.4	1.7	Nil	0.13
	125-134'	9'	9' (-)	Sl. Dis. Sul.	K-168	0.03	0.4	2.6	0.1	0.12
	134-141'	7'	7' (-)	Sl. Dis. Sul.	K-169	0.03	0.5	2.2	Tr.	0.10
	141-143'	2'	--	Wall Rock	-	-	-	-	-	--
	143-150½'	7'	7' (-)	Sl. Dis. Sul.	K-170	0.09	0.6	0.7	Nil	0.11
	150½-162'	11½'	--	Wall Rock	-	-	-	-	-	--
	162-170'	8'	8' (-)	Sl. Dis. Sul.	K-171	0.03	0.2	1.8	Nil	0.64
	170-172'	2'	--	Wall Rock	-	-	-	-	-	--
	172-175'	3'	3' (-)	Sl. Dis. Sul.	K-172	0.01	0.3	0.2	Nil	1.81
	175-178'	3'	--	Wall Rock	-	-	-	-	-	--
	178-185'	7'	7' (-)	Dis. Mass. Sul.	K-173	0.06	0.5	0.2	Tr.	2.84
	185-192'	7'	7' (-)	Dis. Mass. Sul.	K-174	0.08	0.5	4.3	0.6	1.57
	192-200'	8'	--	Wall Rock	-	-	-	-	-	--
	Bottom									

Kay Copper Mine Syn Co.

SUMMARIZED LOGS & ASSAYS CONTINUED

Kay Dec.

Hole No.	Distance	Footage	True Width	Comment	Sample	Au.	Ag.	Zn.	Pb.	Cu.
						Split Core Assays				
Z-10 1200L	0 -79	79	-	Wall Rock						
	79-88	9	9	Dis Sul.	K-120	.05	5.6	10.1	2.7	0.20
	88-120	32	-	Wall Rock						
	Bottom									
Z-11 1200	0 - 5	5	5	Dis Sulf.	K-121	.04	0.8	1.3	0.1	3.20
	5 -10	5	5	" "	K-122	.06	0.6	1.6	Nil	7.00
	10- 22	12	-	Wall Rock						
	22 -27	5	5	Dis. Mas Sul	K-131	.03	1.0	1.5	1.1	0.88
	27 -32	5	5	Dis Sulf	K-132	.04	0.3	0.5	Nil	3.54
	32 -36	4	4	Dis Mass Sul	K-133	.03	1.0	0.3	Nil	5.86
	36 -37	1	-	Wall Rock						
	37 -42	5	5	Dis Sul	K-134	.07	0.5	0.5	Nil	4.02
	42 -47	5	5	Dis Mas Sulf.	K-142	.04	1.0	0.7	Nil	3.20
	47 -52½	5½	5½	Mass Sul	K-143	.05	0.6	3.8	0.9	1.48
	52½-56½	4	4	" "	K-144	.02	1.1	3.9	0.7	2.26
	56½-127	70½	-	Wall Rock		--				
Z-12 1200L.	0 - 6½	6½	-	Wall						
	6½-15	8½	7	Dis Sul	K-145	.03	0.4	0.7	0.3	0.26
	15 -24	9	7½	" "	K-146	.05	1.0	2.2	1.3	0.21
	24 -29	5	4	" "	K-147	.04	0.6	1.1	0.4	0.37
	29 -35	6	5	" "	K-148	.05	0.9	1.8	0.2	0.50
	35 -67	32	-	Ms. Dis Sul		Not Split				
	Bottom									
Z-13A	0- 20	20	20	Dis. Mas Sul		Abandoned- not split				
	Bottom									
Z-13	0 - 7	7	7	Dis Sul		Not Split				
	7 -16	9	9	Mas Sul		" "				
	16 -43	27		Wall Rock & Dis Sul						
	43 -55½	12½		" " " "						
	55½-63	7½		Wall Rock						
	63 -71	8		Wall Rock & sl. diss, Sul.						
	In progress.									

SAN CARLOS MINE Yav. Co.

SUMMARIZED LOGS AND AVAILABLE ASSAYS

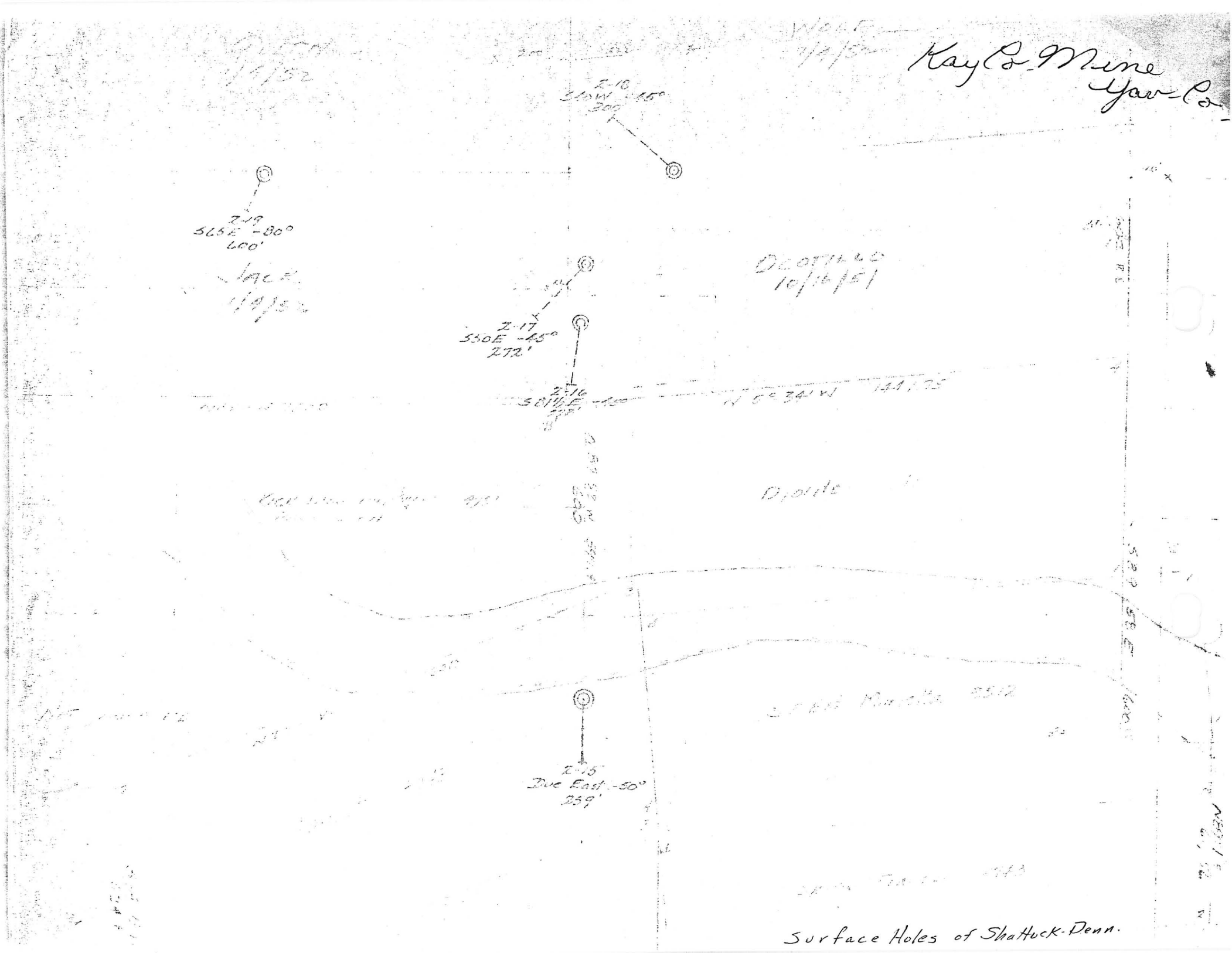
Hole No.	Distance	Footage	True Width	Comment	Sample No.	Au.	Split Ag.	Core Zn.	Assays Pb.	Cu.
Z-12	36-43'	8'	8' (-)	Sl. Dis. Sul.	K-156	0.03	0.5	0.7	Nil	0.20
1200	43-51'	8'	5' (-)	Sl. Dis. Sul.	K-157	0.04	0.9	1.6	0.14	0.24
Level	51-58½'	7½'	4½ (4)	Sl. Dis. Sul.	K-158	0.03	1.0	0.8	Nil	0.20
	58½-67'	8½'	5' (4)	Sl. Dis. Sul.	K-159	0.03	1.9	1.6	0.7	0.33
	Bottom @ 67	In December								
Z-13	0-4'	4'	4' (-)	Sl. Dis. Sul.	K-160	0.01	0.6	1.7	0.4	1.05
1200	4-7'	3'	3' (-)	Sl. Dis. Sul.	K-161	0.07	0.7	1.7	0.5	0.35
Level	7-16'	9'	9' (-)	Mass. Sul.	K-162	0.07	3.1	3.1	0.0	0.07
	16-42'	26'	--	Wall Rock	-	-	-	-	-	--
	42-51'	9'	9' (-)	Sl. Dis. Sul.	K-163	0.03	0.4	0.6	Nil	0.7
	51-94'	43'	--	Wall Rock	-	-	-	-	-	--
	94-102'	8'	8' (-)	Sl. Dis. Sul.	K-164	0.01	0.2	0.5	Nil	1.20
	102-111'	9'	9' (-)	Sl. Dis. Sul.	K-165	0.02	0.3	0.4	Nil	0.48
	111-116'	5'	5' (-)	Sl. Dis. Sul.	K-166	0.01	0.3	Tr.	0.1	0.58
	116-125'	9'	9' (-)	Sl. Dis. Sul.	K-167	0.02	0.4	1.7	Nil	0.13
	125-134'	9'	9' (-)	Sl. Dis. Sul.	K-168	0.03	0.4	2.6	0.1	0.12
	134-141'	7'	7' (-)	Sl. Dis. Sul.	K-169	0.03	0.5	2.2	Tr.	0.10
	141-143'	2'	--	Wall Rock	-	-	-	-	-	--
	143-150½'	7'	7' (-)	Sl. Dis. Sul.	K-170	0.02	0.8	0.7	Nil	0.11
	150½-162'	11½'	--	Wall Rock	-	-	-	-	-	--
	162-170'	8'	8' (-)	Sl. Dis. Sul.	K-171	0.03	0.2	1.8	Nil	0.64
	170-172'	2'	--	Wall Rock	-	-	-	-	-	--
	172-175'	3'	3' (-)	Sl. Dis. Sul.	K-172	0.01	0.3	0.2	Nil	1.51
	175-178'	3'	--	Wall Rock	-	-	-	-	-	--
	178-185'	7'	7' (-)	Dis. Mass. Sul.	K-173	0.06	0.5	0.2	Tr.	2.8
	185-192'	7'	7' (-)	Dis. Mass. Sul.	K-174	0.09	0.5	4.3	0.6	1.5
	192-200'	8'	--	Wall Rock	-	-	-	-	-	--
	Bottom									

HAY CONTER MINE Yar-Co

SUMMARIZED LOGS AND AVAILABLE ASSAYS
(Continued)

Hole No.	Distance	Footage	True Width	Comment	Sample No.	Au.	Ag.	Zn.	Pb.	Cu.
Z-14	0-164'	164'	—	Wall Rock	-	-	-	-	-	-
800	164-171½'	7½'	5½' (+)	Dis. Mass. Sul.	K-175	0.04	0.8	0.7	0.1	1.43
Level	171½-179'	7½'	5½' (+)	Mass. Sul.	K-176	0.05	0.8	1.0	0.1	3.34
	179-186'	7'	5' (+)	Mass. Sul.	K-177	0.04	0.4	4.0	0.3	0.31
	186-187'	1'	—	Wall Rock	-	-	-	-	-	-
	187-194'	7'	5' (+)	Sl. Dis. Sul.	K-178	0.03	0.3	0.6	Tr.	1.[illegible]
	194-205'	11'	9' (+)	Sl. Dis. Sul.	K-179	0.02	0.4	0.5	0.1	0.[illegible]
	205-215'	10'	8' (+)	Sl. Dis. Sul.	K-180	0.01	0.4	0.3	Nil	0.14
	215-235'	20'	16' (+)	Sl. Dis. Sul.	K-181	0.05	0.8	1.2	0.1	0.43
	235-245'	10'	8' (+)	Wall Rock	-	-	-	-	-	-
	245-252'	7'	5' (+)	Dis. Sul.	K-182	0.03	0.6	0.6	Nil	0.42
	252-258'	6'	4' (+)	Sl. Dis. Sul.	K-183	0.02	0.2	0.4	Tr.	0.77
	258-264'	6'	—	Fault ?	-	-	-	-	-	-
	264-269'	5'	4' (-)	Sl. Dis. Sul.	K-184	0.02	0.5	0.8	0.1	0.31
	269-274'	5'	—	Wall Rock	-	-	-	-	-	-
	274-278'	4'	2½' (+)	Mass. Sul.	K-185	0.02	0.2	0.05	Tr.	0.10
	278-280'	2'	—	Wall Rock	-	-	-	-	-	-
	Bottom									
Z-15	0-117'	117'	—	Diorite	-	-	-	-	-	-
Surf-	117-259'	142'	—	Light Grey	-	-	-	-	-	-
ace	Bottom			Sericite Schist with local Carbonate. Locally oxidized.						

Kay Co. Mine
Yav. Co.



Surface Holes of Shattuck-Denn.

COPY

Kay Copper Min. - Yavapai Co

IRON KING MINE
P. O. BOX 68
HUMBOLDT, ARIZONA

SHATTUCK DENN MINING CORPORATION

P. O. BOX 1492
PRESCOTT, ARIZONA

Sept. 20, 1955.

Mr. Earl Hastings,
Corporation Commission,
Phoenix.

Dear Earl:

In reply to yours of yesterday, we have a lot of scattered information but most of the original data was returned to the owners. When I first saw the Kay, about five years ago, Mr. England had opened up a showing of good copper above the 5th level from the inclined #1 shaft, west of the river. On the strength of this showing and a report by John Poss that described this same ore on the 6th level we decided to unwater the main #4 shaft and examine the mine. No. 4 shaft is west of the river, and had levels at 1200 and 800 feet, with a raise from the 1200 to the 600, the bottom level from #1 shaft, and a winze from the 1200 to the 1500, with a large amount of development work on the 1500. We repaired the raise to get up to the 600, and found nothing that I would classify as ore, Mr. Poss' report was apparently unreliable. However we did find that the sampling and mapping done from #4 shaft was quite accurate, indicating little or no ore on the 800 level and the 1200 level. There were spots of good copper near the collar of the winze. The aspects were not encouraging, but N.J.Z. asked to come in with us to do some drilling and geology and we accepted. In the shaft crosscuts on both the 800 and 1200 levels there was a zone of heavy sulfide that had never been assayed for zinc. We drove both north and south on these showings, but they horsetailed out in a short distance. Underground and surface drilling showed nothing to encourage us and we dropped it.

The Kay maps showed a shoot on the 1350 level, off the winze, 120 ft. long assaying 3.4% Cu. On the 1500 level there showed two shoots, the south one 170 ft. long, 3.7% Cu., the north one 180 ft. long 5.7% Cu. Two old drill holes to the 1800 level indicated good copper under the north shoot on the 1500. As stated above the mapping and drills done by the Kay Company were good, and I have no reason to doubt the presence of the ore shown, tho we did not go below the 1200 level.

The assay in the winze below the 1200 were very erratic. While I cannot say that the tonnages indicated in your letter are not there, I believe it extremely difficult to mine the grade indicated. Our chief reason for abandoning the Kay was the very erratic nature of the deposits. This lack of consistency would cause relatively high mining and exploration costs and make it difficult to actually block out ore.

Yours very truly,

H.F.Mills.

Kay Copper Mine 2
Yav. Co

"Continuation of ore bodies proven by diamond drilling from the 1200 foot level to the 2400 foot level show an average grade of 9.0% copper. No estimate of the ore values below the 1200 foot level are given, but will add considerably to the ten year life of the mine, based on an estimated production of from fifty to one hundred ton daily production."

Any assistance you might give us in this matter would be gratefully received.

Very truly yours,

Earl F. Hastings

Earl F. Hastings

EFH-jrf

L. E. FOSTER
Mining Engineer

DEPT. MINERAL RESOURCES
DEC 10 1945
PHOENIX, ARIZ.

Silver City, N. M.
December 9, 1945

Mr. Charles H. Dunning, Director
Arizona Department of Mineral Resources
Phoenix, Arizona.

Dear Mr. Dunning:-

During the war and since, the owners of the old Kay Copper Mine, Rock Springs(Canyon), Yavapai County, Arizona, have tried to secure finances for the reopening and putting in operation of the Kay, and, also tried to sell it.

No avenue, either Goverment or otherwise, brought us any results, and still wanting some definite action either for refinancing or sale of property, would appreciate any suggestions that you might be able to make to continue our efforts.

You have some data regarding the Kay in the Department files and should you wish more would be glad to send it to you.

With best wishes of the season

Yours sincerely

L. E. Foster

L. E. Foster
802 Black St., Silver City, N. M.

May 5, 1942

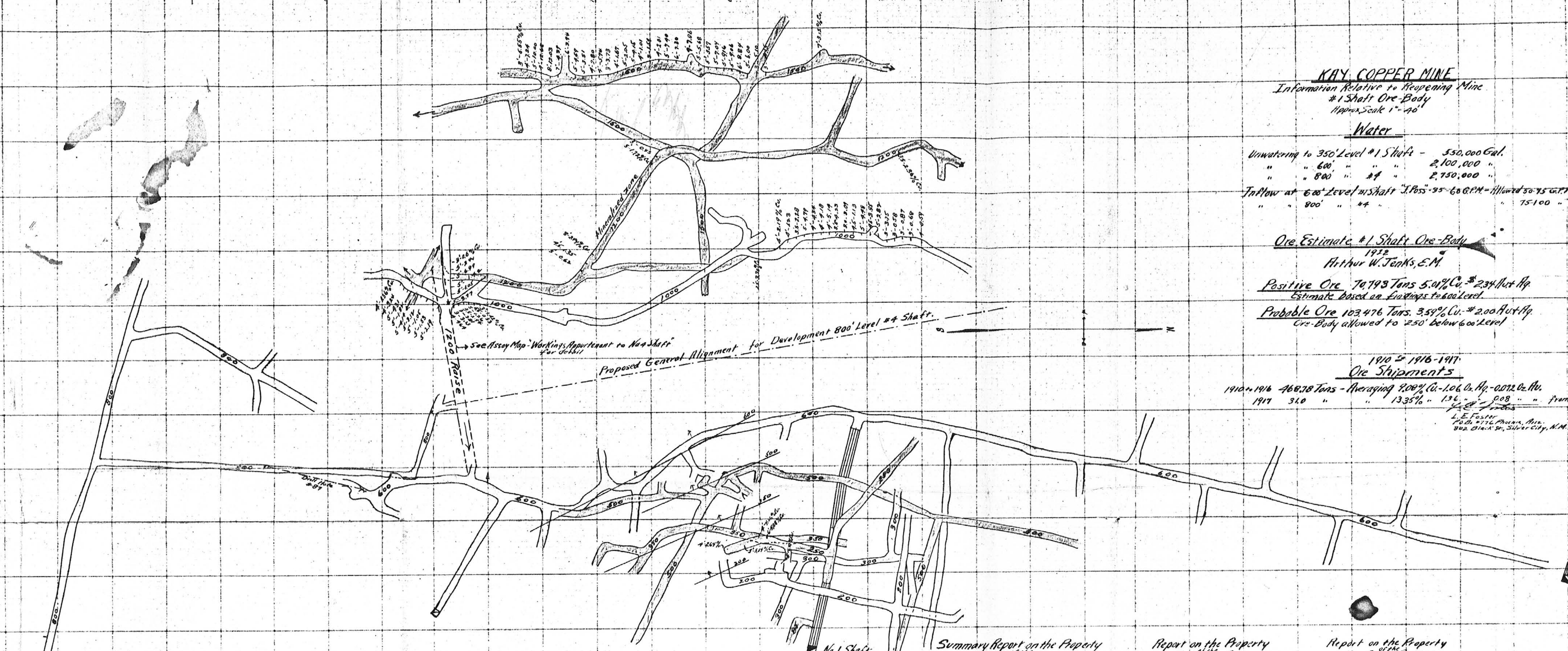
MEMO TO J. S. COUPAL

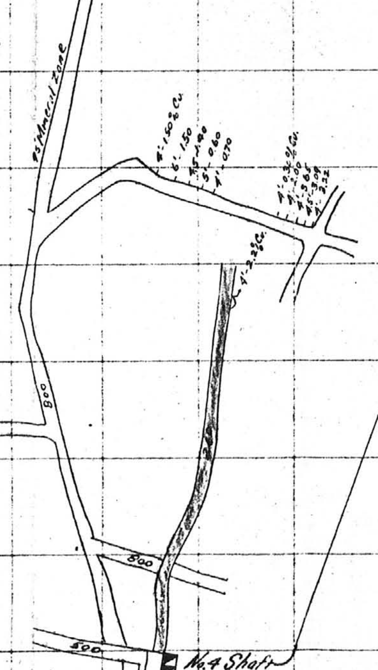
A. W. Amos, Route 3, Box 299, Phoenix, was in the office discussing what could be done regarding the Kay mine.

This mine is owned by Amos, L. E. Foster, Box 107, Lone Pine, California, and O. D. Judd, 1150 Farmers Ave., Tempe. It is badly under water and he wanted to know about a mine loan. I told him a mine loan could not be obtained to unwater.

I would suggest that you write him relative to the U. S. Bureau of Mines, Copper Development Fund, as he might have a chance on that.

C. F. W.





KAY COPPER MINE

Information Relative to Reopening Mine
#1 Shaft Ore-Body
Approx. Scale 1" = 40'

Water

Unwatering to 350' Level #1 Shaft - 550,000 Gal.
" " 600' " " " 2,100,000 "
" " 800' " #4 " 2,750,000 "

Inflow at 600' Level #1 Shaft "J. Poss" 35 - 60 G.P.M. - Allowed 50-75 G.P.M.
" " 800' " #4 " " 75-100 "

Ore Estimate #1 Shaft Ore-Body

1932
Arthur W. Jenks, E.M.

Positive Ore 70,793 Tons 5.01% Cu. - $2.34 Au + Ag.
Estimate based on findings to 600' Level.

Probable Ore 103,476 Tons. 3.59% Cu. - $2.00 Au + Ag.
Ore-Body allowed to 250' below 600' Level

1910 to 1916 - 1917
Ore Shipments

1910 to 1916 468.78 Tons - Averaging 9.08% Cu. - 1.06 Oz. Ag. - 0.012 Oz. Au.
1917 31.0 " " 13.35% " 1.36 " 0.08 " " from 350' Level #1 Shaft.

L. E. Foster
P.O. Bx #776 Phoenix, Ariz.
802 Black St., Silver City, N.M.

Supplement to Kay Copper Company Summary Report

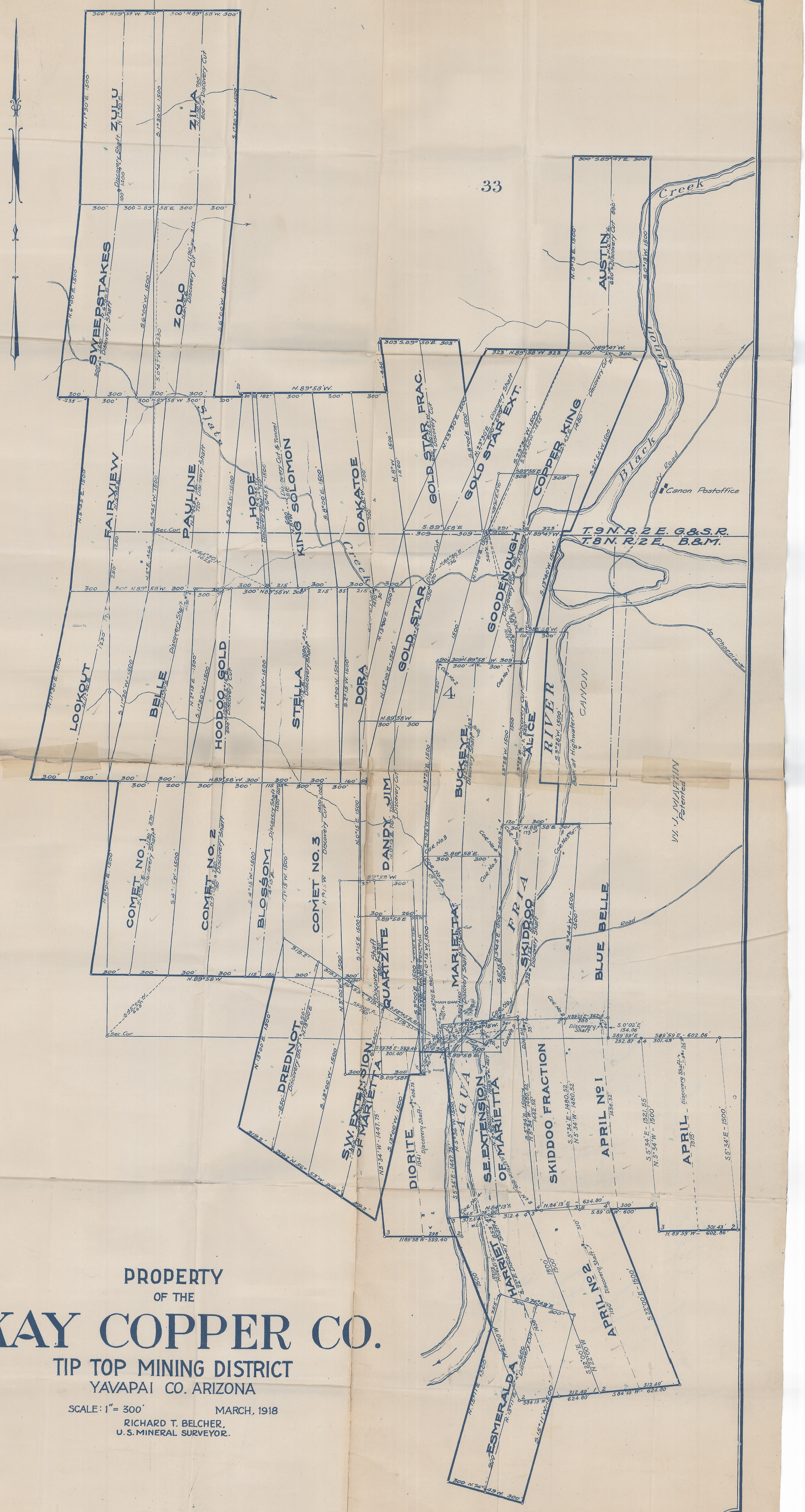
0'-212' - Low Grade mineralization (135-212' parallel fault system)
212'-331' - Little "
331' - Belt chloritic Schist - Some mineralization small bands parallel to schistosity - Gray copper. Occassional small streaks chalcopyrite.
354' - 18" zone - 3.0% Cu. Average - Fairly heavy replacement of blue schist
384' - 18" zone widened to 4' assaying 1.52% Cu.
396' - 7' wide (4' assayed 1.65% Cu. - 3' averaged 1.03% Cu.)
404' - 9' " (5' " 1.85% " - 4' " 1.00% Cu.)
426' - Bottom of shaft - April 24-1921

Mineralization stronger to south side shaft. On north side more Quartz, indicating ore shoot to south.

By - John Poss April 24th - 1921

No.1 Shaft	Summary Report on the Property of the Kay Copper Company by John R. Poss, E.M. 3-20-20	Report on the Property of the Kay Copper Company by C.H. James 3-7-18	Report on the Property of the Kay Copper Company by W. E. Defry, E.M. - Between 1918 + 1920
100' Level (85')	Drift and Xcut in ore	Drifting and Xcutting in ore. 2 Carloads ore reported shipt.	
200' Level	Ore in south drift from 50' to 120' from shaft. Fault encountered at face. Xcutting exposed ore width of 20'	South drift ore-body reported 8-12' wide. Shipping grade. Length ore-body over 30'	South drift follows ore-body average 6' wide.
250' Level	(with 300' Level:) Xsection of ore body gives an average of 4.8% Cu.	Ore-body south drift reported 40' long 12' wide. 35' Raise - 8 Cars ore shipt. Stope ends and portion of walls showed 7-9% Cu., width 7 to 9'. Considerable good ore above level.	South drift cuts to ore-body few feet from shaft and follows to a point 60' south shaft. Several cars ore shipt. Considerable tonnage ore remains
300' Level	Xsection of ore body gives an average of 4.8% Cu.	Ore-body south drift 70' long 10' wide. 8 Cars ore shipt	South drift 70' in ore-body. Reported width of 8' with lower grade ore left in wall. Over 8 cars ore shipt from level and stope, average 8 to 13% Cu. Good deal ore remaining
350' Level	South drift extended across fault and displaced ore partially developed. Face in ore.	Ore-body south drift 44' long. Face shows 7' good ore. Sample hole in footwall 5' - drillings assayed 9% Cu. W. Xcut at 56' cut 15' ore. One car ore shipt from Level - 13.5% Cu. Ore-body proved over 15' wide and 45' long with south face in ore. No work below 350' Level	South drift shows 55' ore. Face shows 7' ore. 5' test hole in footwall assayed 9% Cu. Proven width 18' - 60' south of shaft. One car ore shipt, assayed 13.5% Cu.
500' Level	Xsection ore-body showed a width of 30' averaying 5.4% Cu. Drifting beyond fault for 60' remained in ore.		South drift in ore-body 45'. Face 60' further south assays 13.4% Cu. S.E. Xcut 15' South of shaft shows with drift 16' ore assaying over 9% Cu. with 6' lower grade last 6' of 21' Xcut. South drift between E. Xcuts at 65 and 75' south shaft in ore 4 to 12% Cu. N.E. Xcut at 90' from shaft exposes with drift 18' ore 4 to 10% Cu. S.W. Xcut " " 4½' of ore 8.4% Cu. and 4½' of 3.2% Cu. Ore. S.E. Xcut 45' south of shaft 53' long - 0-6' assays 5.3% Cu.; 6-25 " 1.4% Cu.; 25-35 " 3% Cu.; 35-41 " 6.4% Cu.; 41-46 " 6.6% Cu.; 46-53 " 1.9% ". At 150' South shaft 8' test holes put in hanging wall ran 4.4% Cu. No work below 500' Level
600' Level	Ore body in south drift 130' south of shaft. Xcutting showed a width of 32' averaying 4% Cu. Total length of ore-body 180' - 50' on north side fault. Face in ore. Short diamond-drill holes revealed width 40'. (500'-600' Levels:) Xcutting indicated ore-body 20' east in foot wall. Lens averaged 15' of 9% Cu. Indications are both orebodies will unit lower down.		

DEFECT CROSS SECTION 10 X 10 ONE INCH
PRINTED IN U.S.A. ON 100% RAG PAPER MADE IN U.S.A.



PROPERTY
OF THE
KAY COPPER CO.
TIP TOP MINING DISTRICT
YAVAPAI CO. ARIZONA

SCALE: 1" = 300' MARCH, 1918

RICHARD T. BELCHER,
U.S. MINERAL SURVEYOR.

KAY COPPER MINE

Information Relative to Reopening Mine
#1 Shaft Ore-Body
Approx. Scale 1" = 40'

Water

Unwatering to 350' Level #1 Shaft - 550,000 Gal.
" " 600' " " " 2,100,000 "
" " 800' " #4 " 2,750,000 "

Inflow at 600' Level in Shaft "J. Poss" 35-60 G.P.M. - Allowed 50-75 G.P.M.
" " 800' " #4 " " 75-100 "

Ore Estimate #1 Shaft Ore-Body

1922
Arthur W. Jenks, E.M.

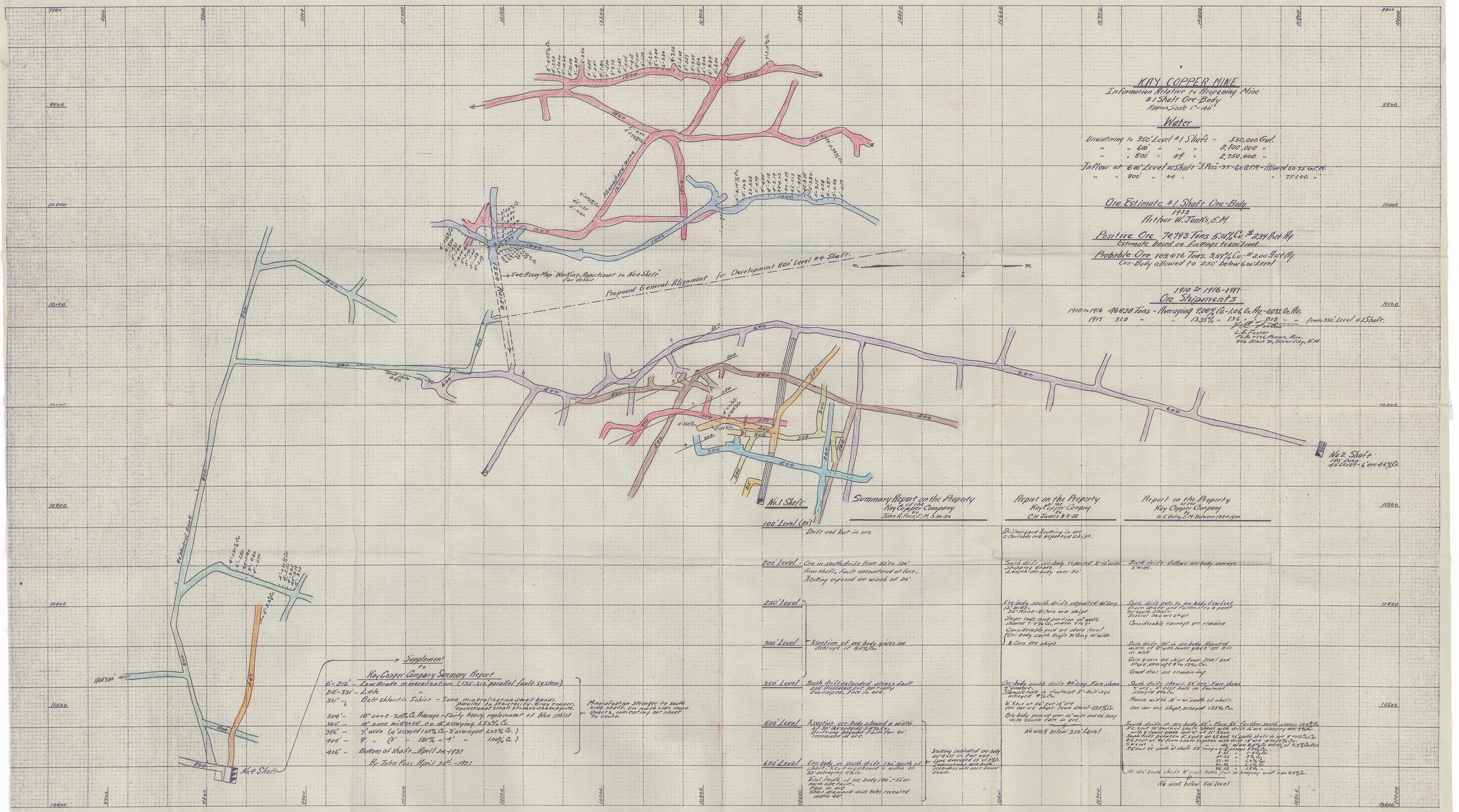
Positive Ore 74,793 Tons 5.01% Cu. @ $234 Act. Hp.
Estimate based on findings to 600' Level

Probable Ore 103,476 Tons. 3.59% Cu. - @ 2.00 Act. Hp.
Ore-Body allowed to 250' below 600 Level

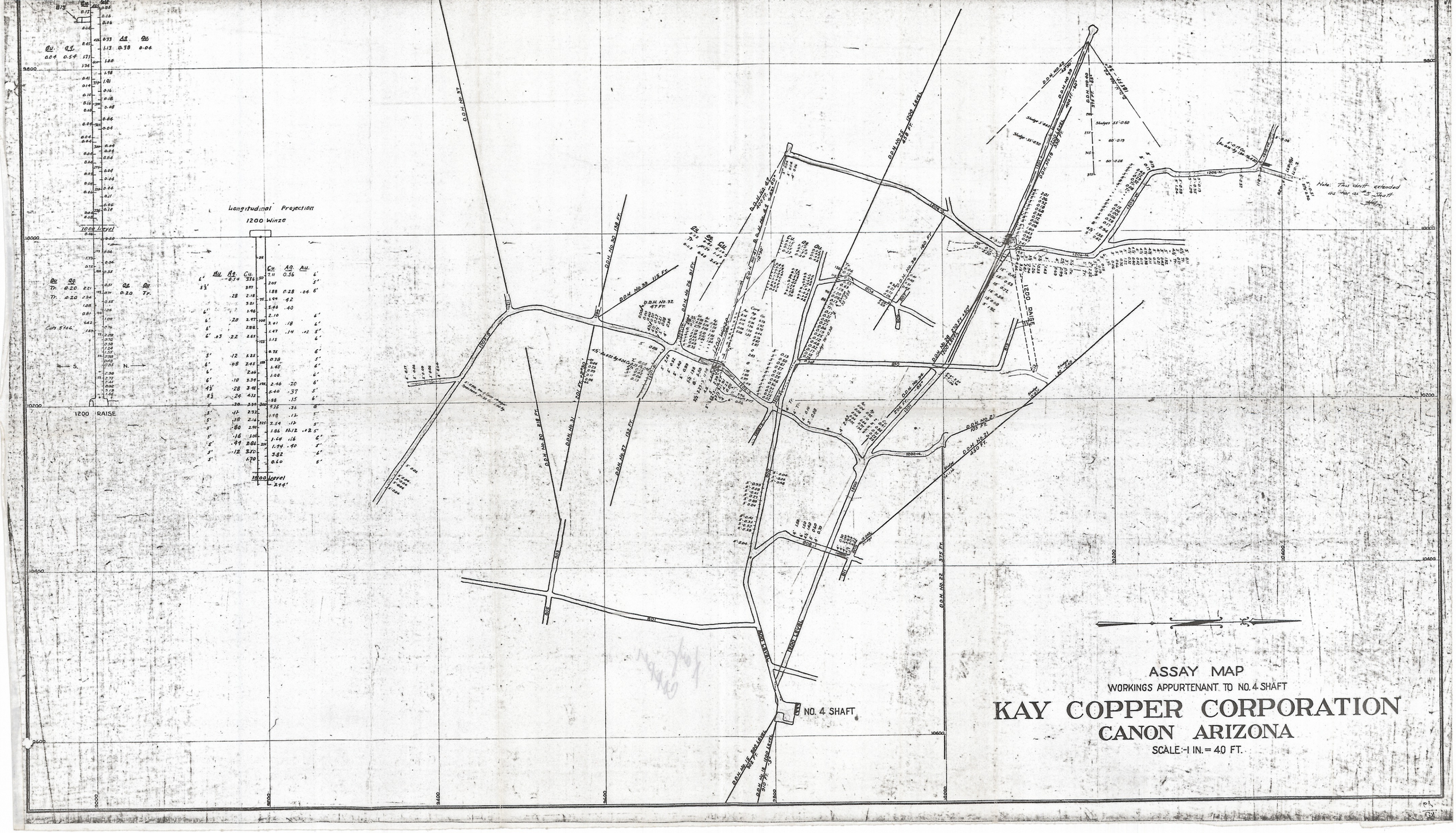
1910 to 1916-1917 Ore Shipments

1910 to 1916 46,938 Tons - Averaging 7.08% Cu. - 1.06 Oz. Ag. - 0.072 Oz. Au.
1917 310 " " 13.35% " 13.6 " " 0.08 " " from 350' Level #1 Shaft.

L. E. Foster
P.O.B. #776 Phoenix, Ariz.
802 Black St., Silver City, N.M.



"PERFECT" CROSS SECTION 10 X 10 - ONE INCH EUGENE DIETZGEN CO.
PRINTED IN U.S.A. ON 100% RAG PAPER MADE IN U.S.A.
"PERFECT" CROSS SECTION 10 X 10 - ONE INCH EUGENE DIETZGEN CO.
PRINTED IN U.S.A. ON 100% RAG PAPER MADE IN U.S.A.


Longitudinal Projection
1200 Winze
1000 Level
1200 Level
1200 RAISE
1200 LEVEL
1200 WINZE
1200 RAISE
NO. 4 SHAFT
Note: This drift extended as far as 5 Shaft
ASSAY MAP
WORKINGS APPURTENANT TO NO. 4 SHAFT
KAY COPPER CORPORATION
CANON ARIZONA
SCALE:-1 IN. = 40 FT.